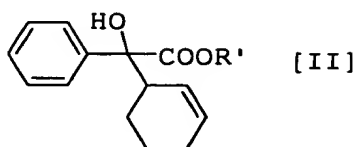


WHAT IS CLAIMED IS

1. A compound of the formula [II]



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5 wherein R' is linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl, norbornyl, methoxycarbonyl, ethoxycarbonyl and (α-(2-cyclohexen-1-yl)-α-hydroxy-

10 benzyl)carbonyloxy, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl, or an optically active form thereof.

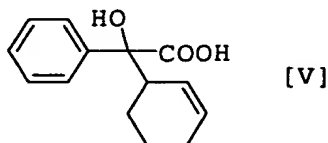
15

2. The compound of claim 1, wherein R' is linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl and

20 norbornyl, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl, or an optically active form thereof.

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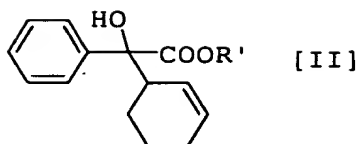
3. A compound of the formula [V]



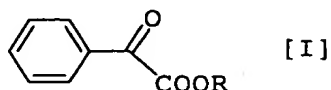
36 4. A method for producing a compound of the formula [II]

an optically active form thereof or a salt thereof.

39



wherein R' is as defined in claim 1, or an optically active form thereof, which method comprising reacting a compound the formula [I]



wherein R is linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl, norbornyl, methoxycarbonyl, ethoxycarbonyl and benzoylcarbonyloxy, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl or an optically active form thereof, with cyclohexene in the presence of a Lewis acid.

5. The production method of claim 4, wherein R and R' are each linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl and norbornyl, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl.

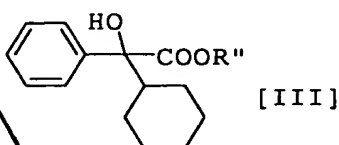
6. The production method of claim 4, wherein R and R' are each a group having an asymmetric carbon atom.

7. The production method of claim 4, wherein the Lewis acid is an optically active Lewis acid having an asymmetric ligand.

8. The production method of claim 4, wherein the Lewis acid is titanium tetrachloride.

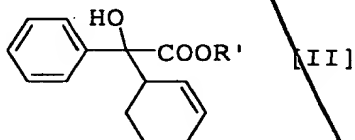
5 9. The production method of any of claims 4 to 8, wherein the reaction is carried out in monochlorobenzene.

10. A method for producing a compound of the formula [III]



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10 wherein R'' is linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl, norbornyl, methoxycarbonyl, ethoxycarbonyl and (α-cyclohexyl-α-hydroxybenzyl)carbonyloxy, 15 or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl or an optically active form, which method comprising reducing a compound of the formula [II]

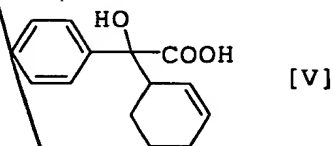


20 wherein R' is as defined in claim 1, or an optically active form thereof.

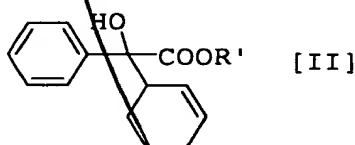
11. The production method of claim 10, wherein R' and R'' are 25 each linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl and norbornyl, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at 30 least one substituent selected from the group consisting of

linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl.

12. A method for producing a compound of the formula [V]



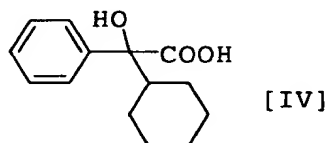
, an optically active form thereof or a salt thereof, which method comprising hydrolyzing a compound of the formula [II]



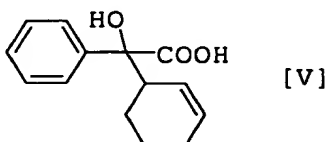
wherein R' is as defined in claim 1,
or an optically active form thereof.

13. The production method of claim 12, wherein R' is linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl and norbornyl, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl.

14. A method for producing 2-cyclohexyl-2-hydroxy-2-phenylacetic acid of the formula [IV]

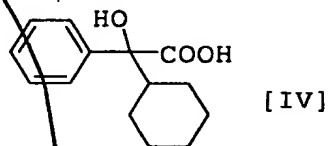


, an optically active form thereof or a salt thereof, which method comprising reducing a compound of the formula [V]

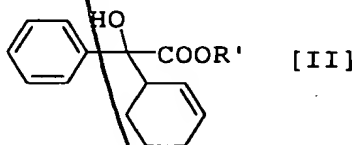


, an optically active form thereof or a salt thereof.

15. A method for producing 2-cyclohexyl-2-hydroxy-2-phenylacetic acid of the formula [IV]



, an optically active form thereof or a salt thereof, which method comprising subjecting a compound of the formula [II]



wherein R' is as defined in claim 1, or an optically active
10 form thereof, to hydrolysis and reduction.

16. The production method of claim 15, wherein R' is linear or
branched chain alkyl having 1 to 15 carbon atom(s), which is
optionally substituted by at least one substituent selected
15 from the group consisting of phenyl, naphthyl, cyclohexyl,
cyclopentyl and norbornyl, or cyclohexyl, cyclopentyl or
norbornyl, which is optionally substituted by at least one
substituent selected from the group consisting of linear or
branched chain alkyl having 1 to 15 carbon atom(s) and phenyl.

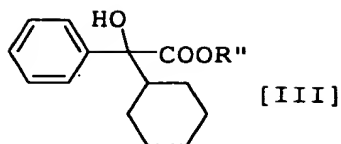
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17. The production method of claim 15, which comprises
simultaneous hydrolysis and reduction.

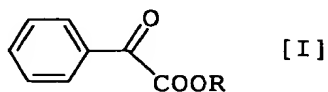
18. The production method of claim 15, which comprises
25 hydrolysis after reduction.

19. The production method of claim 15, which comprises
reduction after hydrolysis.

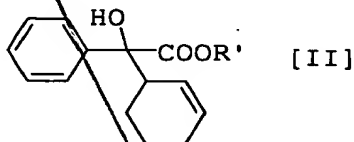
30 20. A method for producing a compound of the formula [III]



wherein R'' is as defined in claim 10, or an optically active form thereof, which method comprising reacting a compound the formula [I]



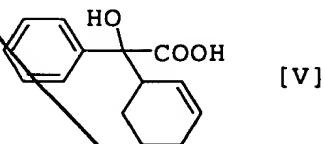
wherein R is as defined in claim 4, or an optically active form thereof, with cyclohexene in the presence of a Lewis acid to give a compound of the formula [II]



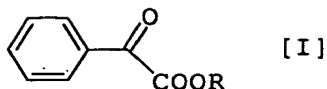
wherein R' is as defined in claim 1, or an optically active form thereof, and reducing the same.

21. The production method of claim 20, wherein R' and R'' are each linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl and norbornyl, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl.

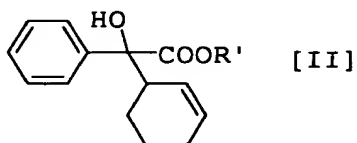
22. A method for producing a compound of the formula [V]



, an optically active form thereof or a salt thereof, which method comprising reacting a compound of the formula [I]



wherein R is as defined in claim 4, or an optically active form thereof, with cyclohexene in the presence of a Lewis acid to give a compound of the formula [II]

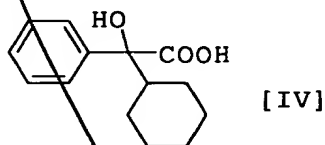


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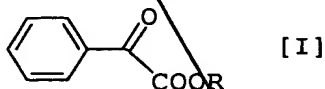
wherein R' is as defined in claim 1, or an optically active form thereof, and hydrolyzing the same.

23. The production method of claim 22, wherein R and R' are
 10 each linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl and norbornyl, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at
 15 least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl.

24. A method of producing 2-cyclohexyl-2-hydroxy-2-phenylacetic acid of the formula [IV]

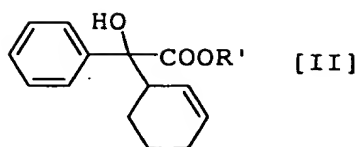


, an optically active form thereof or a salt thereof, which method comprising reacting a compound of the formula [I]



25 wherein R is as defined in claim 4, or an optically active form thereof, with cyclohexene in the presence of a Lewis acid to give a compound of the formula [II]

*Sum
P.H.*



wherein R' is as defined in claim 1, or an optically active form thereof, and subjecting the same to hydrolysis and reduction.

5

25. The production method of claim 24, wherein R and R' are each linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl and norbornyl, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl.

15

26. The production method of claim 24, which comprises simultaneous hydrolysis and reduction.

27. The production method of claim 24, which comprises hydrolysis after reduction.

28. The production method of claim 24, which comprises reduction after hydrolysis.